



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,404	11/13/2003	Stephan S. Porter	47168-00245USPT	9907
30223	7590	11/29/2006	EXAMINER	
JENKENS & GILCHRIST, P.C. 225 WEST WASHINGTON SUITE 2600 CHICAGO, IL 60606			WILSON, JOHN J	
			ART UNIT	PAPER NUMBER
			3732	

DATE MAILED: 11/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/713,404		PORTER ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	John J. Wilson		3732	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-67,69 and 70 is/are pending in the application.
- 4a) Of the above claim(s) 58-66 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-67,69 and 70 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/26/06</u> .   | 6) <input type="checkbox"/> Other: _____                          |

***Election/Restrictions***

Claims 58-66 stand withdrawn as being directed to a non-elected invention.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 8, 11, 14-17, 19, 22, 26, 29-32, 35, 46 and 48-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Sutter et al (5947733). Sutter shows an implant 1, Fig. 5a, proximal end as shown, interior bore 12, first anti-rotation cavity 18 and a second anti-rotational cavity 15. As described the expanding ring 500 securely fixes the tapered surfaces 14, 20 against rotation, column 8, lines 22-27. The diameter of the second cavity is no greater than the first as shown. To call the diameters minor diameters is merely terminology. As to claims 2, the surface 15 is inherently capable of mating with a driving tool. As to claim 8, see first axial retention section 21, Fig. 5, distal of the second anti-rotation cavity. As to claims 22 and 35, the first and second anti-rotation cavities are inherently capable of mating with an abutment and driving tool. As

to claims 46 and 50, the intended use of the shown structure with abutments and the type of abutments are merely matters of intended use, and as such, are not given patentable weight.

Claims 1-6, 8, 11, 14, 17-22, 26, 29, 31-35 and 46-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Schiel et al (5993213). Schiel shows an implant, Fig. 4, proximal end as shown, interior bore as shown, and anti-rotation cavity 15. To call the top half of 15 a first anti-rotation cavity and the bottom half of 15 a second anti-rotation cavity is merely terminology and/or intended use. The second anti-rotation cavity has a diameter no greater than the first as shown. As to claim 8, see first axial retention section 19 distal of the second anti-rotation cavity. As to claims 22 and 35, the first and second anti-rotation cavities are inherently capable of mating with an abutment and driving tool. As to claims 46 and 50, the intended use of the shown structure with abutments and the type of abutments are merely matters of intended use, and as such, are not given patentable weight.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9, 10, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sutter et al (5947733) in view of Kownacki et al (5302125). Sutter shows the structure as described above, however, does not show a recess. Kownacki shows a recess 77, Fig. 8, above a threaded section 26. It would be obvious to one of ordinary skill in the art to modify Sutter to include a recess of Kownacki in order to better hold the device to the implant.

Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sutter et al (5947733) in view of Niznick (5061181). Sutter teaches using an abutment 800 adapted to engage the second anti-rotation cavity, however, does not show a driving tool. Niznick shows a driving tool, Fig. 3D, column 4, lines 35-39. It would be obvious to one of ordinary skill in the art to modify Sutter to include a driving tool as shown by Niznick in order to drive the implant into the bone.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sutter et al (5947733) in view of Duerr et al (5823776). Sutter shows the structure as described above, however, does not show an anti-rotation feature that is adapted to enable rotational adjustments of 30 degrees for an abutment. Duerr teaches an anti-rotation feature 26', column 5, lines 5-7, that allows for 30 degrees of adjustments. It would be obvious to one of ordinary skill in the art to modify Sutter to include an adjustment feature as shown by Duerr in order to better align the prosthetic tooth with other teeth in the mouth.

Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sutter et al (5947733) in view of Bassett et al (6012923). Sutter shows the structure as described above, however, does not show two anti-rotation features adapted to have different incremental adjustments. Bassett teaches using different polygonal shapes to provide for double indexing, column 7, lines 35-42. It would be obvious to one of ordinary skill in the art to modify Sutter to include different shapes to allow for different incremental adjustments as shown by Bassett in order to better align the prosthetic tooth with other teeth in the mouth.

Claims 36 and 39-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sutter et al (5947733) in view of Gittleman (2002/0127515). Sutter shows an implant 1, Fig. 5a, proximal end as shown, interior bore 12, first anti-rotation cavity 18 and a second anti-rotational cavity 15. As described the expanding ring 500 securely fixes the tapered surfaces 14, 20 against rotation, column 8, lines 22-27. Sutter shows an abutment, however, does not show using first and second abutments. Gittleman shows a first abutment 65, Fig. 3, having a non-locking portion 63 and a locking portion 57, and shows a second abutment 6, Fig. 2, having a locking portion 9. The implant and abutments are merely listed in the claims and not structurally tied together. It would be obvious to one of ordinary skill in the art to modify Sutter to include the abutments as shown by Gittleman because the list of elements is properly met by listing

the same elements shown in prior art. The manner in which the elements may be used or adapted to be positioned together is merely intended use.

Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sutter et al (5947733) in view of Gittleman (2002/0127515) as applied to claim 36 above, and further, in view of Sager (6315563). The above combination does not show a distal non-locking portion. Sager shows an abutment 32 having a distal non-locking portion 44. It would be obvious to one of ordinary skill in the art to modify the above combination to include an abutment having a distal non-locking portion as shown by Sager in order to better stabilize the abutment within an implant.

Claims 38 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sutter et al (5947733) in view of Gittleman (2002/0127515) as applied to claims 36 and 39 above, and further in view of Niznick (5061181). Sutter teaches using an abutment 800 adapted to engage the second anti-rotation cavity, however, the above combination does not show a driving tool. Niznick shows a driving tool, Fig. 3D, column 4, lines 35-39. It would be obvious to one of ordinary skill in the art to modify the above combination to include a driving tool as shown by Niznick in order to drive the implant into the bone.

Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sutter et al (5947733) in view of Niznick (5061181). Sutter teaches using an implant 1, Fig. 5a

having a first anti-rotation feature comprising an internal polygonal feature 15 and a second anti-rotation feature 12, and teaches engaging an abutment 800 with the second anti-rotation feature. Sutter does not state how the implant is inserted in the bone. Niznick shows using torque by way of a driving tool, Fig. 3D, column 4, lines 35-39, for engaging a polygonal feature, Fig. 3D. It would be obvious to one of ordinary skill in the art to modify Sutter to include the step of using a driving tool as shown by Niznick in order to drive the implant into the bone.

Claims 52-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sutter et al (5947733) in view of Broberg et al (6280195). Sutter teaches the step of coupling an abutment 800 to at least one of two internal anti-rotation features, 12, 15, however, does not show selecting an abutment from a plurality of abutments. Broberg teaches selecting the abutment from a plurality of abutments, column 5, line 65 through column 6, line 5. It would be obvious to one of ordinary skill in the art to modify Sutter to include using an abutment and to include the step of selecting the abutment from a plurality of abutments as shown by Broberg in order to better match the abutment with the needs of the patient. With respect to the abutment being coupled after the implant is installed, Broberg also teaches installing the implant, then taking an impression, then selecting an abutment that best matches the patient's contours.

Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sutter et al (5947733) in view of Broberg et al (6280195) as applied to claim 55 above, and



further in view of Niznick (5061181). The above combination teaches the steps described above, however, does not state how the implant is inserted in the bone. Niznick shows using a driving tool, Fig. 3D, column 4, lines 35-39, for engaging an anti-rotation feature, Fig. 3D. It would be obvious to one of ordinary skill in the art to modify Sutter to include the step of using a driving tool as shown by Niznick in order to drive the implant into the bone.

Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sutter et al (5947733) in view of Broberg et al (6280195) as applied to claim 55 above, and further, in view of Kumar (6217332). The above combination does not show removing the drive tool and implant from a package. Kumar teaches removing a drive tool 119 and implant 120 for a package. It would be obvious to one of ordinary skill in the art to modify the above combination to include using a package as shown by Kumar in order to improve convenience and hygiene.

Claim 67 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sutter et al (5947733) in view of Niznick (5061181). Sutter teaches an implant 1, Fig. 5a having a first anti-rotation feature comprising an internal polygonal feature 15 and a second anti-rotation feature 12, and an abutment 800 with the second anti-rotation feature. Sutter does not a mount adapted to couple to the first anti-rotational feature to transfer torque to the implant. Niznick shows a driving tool, Fig. 3D, column 4, lines 35-39, for engaging an anti-rotational feature, Fig. 3D. It would be obvious to one of ordinary skill

in the art to modify Sutter to include a driving tool as shown by Niznick in order to drive the implant into the bone. To call the tool a mount is merely a matter of terminology.

Claim 69 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sutter et al (5947733) in view of Niznick (5061181) as applied to claim 67 above, and further, in view of Kumar (6217332). The above combination does not show removing the drive tool and implant from a package. Kumar teaches removing a drive tool 119 and implant 120 for a package. It would be obvious to one of ordinary skill in the art to modify the above combination to include a package as shown by Kumar in order to improve convenience and hygiene.

Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sutter et al (5947733) in view of Niznick (5061181) as applied to claim 67 above, and further, in view of Beaty et al (5685715). The above combination does not show using an impression coping for the mount. Beaty shows an impression coping 10 as a mount. It would be obvious to one of ordinary skill in the art to modify the above combination to include an impression coping as shown by Beaty in order to better take an impression when needed.

Claims 9, 10, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schiel et al (5993213) in view of Kownacki et al (5302125). Schiel shows the structure as described above, however, does not show a recess. Kownacki

shows a recess 77, Fig. 8, above a threaded section 26. It would be obvious to one of ordinary skill in the art to modify Schiel to include a recess of Kownacki in order to better hold the device to the implant.

Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schiel et al (5993213) in view of Niznick (5061181). Schiel does not show a driving tool. Niznick shows a driving tool, Fig. 3D, column 4, lines 35-39. It would be obvious to one of ordinary skill in the art to modify Schiel to include a driving tool as shown by Niznick in order to drive the implant into the bone.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schiel et al (5993213) in view of Duerr et al (5823776). Schiel shows the structure as described above, however, does not show an anti-rotation feature that is adapted to enable rotational adjustments of 30 degrees for an abutment. Duerr teaches an anti-rotation feature 26', column 5, lines 5-7, that allows for 30 degrees of adjustments. It would be obvious to one of ordinary skill in the art to modify Schiel to include an adjustment feature as shown by Duerr in order to better align the prosthetic tooth with other teeth in the mouth.

Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schiel et al (5993213) in view of Bassett et al (6012923). Schiel shows the structure as described above, however, does not show two anti-rotation features

adapted to have different incremental adjustments. Bassett teaches using different polygonal shapes to provide for double indexing, column 7, lines 35-42. It would be obvious to one of ordinary skill in the art to modify Schiel to include different shapes to allow for different incremental adjustments as shown by Bassett in order to better align the prosthetic tooth with other teeth in the mouth.

Claims 36, 39 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schiel et al (5993213) in view of Gittleman (2002/0127515). Schiel shows an implant, Fig. 4, proximal end as shown, interior bore as shown, and anti-rotation cavity 15. To call the top half of 15 a first anti-rotation cavity and the bottom half of 15 a second anti-rotation cavity is merely terminology and/or intended use. The second anti-rotation cavity has a diameter no greater than the first as shown. Schiel does not show using first and second abutments. Gittleman shows a first a first abutment 65, Fig. 3, having a non-locking portion 63 and a locking portion 57, and shows a second abutment 6, Fig. 2, having a locking portion 9. The implant and abutments are merely listed in the claims and not structurally tied together. It would be obvious to one of ordinary skill in the art to modify Schiel to include the abutments as shown by Gittleman because the list of elements is properly met by listing the same elements shown in prior art. The manner in which the elements may be used or adapted to be positioned together is merely intended use.

Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schiel et al (5993213) in view of Gittleman (2002/0127515) as applied to claim 36 above, and further, in view of Sager (6315563). The above combination does not show a distal non-locking portion. Sager shows an abutment 32 having a distal non-locking portion 44. It would be obvious to one of ordinary skill in the art to modify the above combination to include an abutment having a distal non-locking portion as shown by Sager in order to better stabilize the abutment within an implant.

Claims 38 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schiel et al (5993213) in view of Gittleman (2002/0127515) as applied to claims 36 and 39 above, and further in view of Niznick (5061181). The above combination does not show a driving tool. Niznick shows a driving tool, Fig. 3D, column 4, lines 35-39. It would be obvious to one of ordinary skill in the art to modify the above combination to include a driving tool as shown by Niznick in order to drive the implant into the bone.

### ***Terminal Disclaimer***

The terminal disclaimer filed on September 26, 2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any patent that issues from application Serial No. 10/713,328 has been reviewed and is accepted. The terminal disclaimer has been recorded.

***Information Disclosure Statement***

The IDS filed September 26, 2006 has been considered and an initialed copy is attached.

***Allowable Subject Matter***

Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

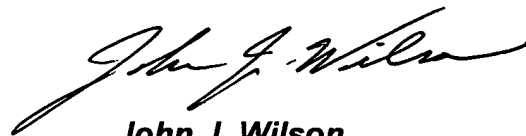
Applicant's arguments filed September 26, 2006 have been fully considered but they are not persuasive. Applicant's remarks are held to be moot in view of the newly applied references and rejections above.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Wilson whose telephone number is 571-272-4722. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez, can be reached at 571-272-4964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**John J. Wilson**  
**Primary Examiner**  
**Art Unit 3732**

jjw  
November 25, 2006